ABSTRACT OF THE DISCLOSURE

An image processing device is provided to efficiently embed digital watermark information in a gray scale image while suppressing deterioration in the image quality. The image processing device includes an input unit for inputting gray-scale image data in which each pixel is formed of one component. A converter converts the format of the gray-scale image data into color image data in which each pixel is formed of a plurality of components. An embedding unit embeds the digital watermark information in part of the components of the color image data obtained by the converter.